APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,702	12/04/2003	Delmar Eugene Blevins	SVL920030072US1	9001

45727   7590   10/08/2009
IP AUTHORITY, LLC
RAMRAJ SOUNDARARAJAN
4821A Eisenhower Ave
Alexandria, VA 22304

EXAMINER
ADAMS, CHARLES D

ART UNIT	PAPER NUMBER
2164	

NOTIFICATION DATE	DELIVERY MODE
10/08/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

RAM@IP-AUTHORITY.COM
brandi@ip-authority.com

	Application No.	Applicant(s)
	10/726,702	BLEVINS ET AL.
Office Action Summary	Examiner	Art Unit	
	CHARLES D. ADAMS	2164	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2009*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6, 8-16, and 18-25* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to communications filed on 14 July 2009, claims 1, 11, 12, and 18

are amended, claims 7, 17, and 26-31 are cancelled. Claims 1-6, 8-16, and 18-25 are

pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-2, 6, 8-13, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Benson et al. (US Pre-Grant Publication 2003/0200212) in view of

Cotner et al. (US 5,884,327), and further in view of Verma et al. (US Patent 7,072,912).

        As to claim 1, Benson et al. teaches a computer-based method implementing a

robust 2-phase commit protocol between a client and a server via a relational table and

software facilitating communications with said client and said server, said relational

table storing a list of potentially indoubt units of work (see abstract, paragraphs [0032]-

[0034]), said method comprising the steps of:

        (a) receiving an invocation from said client for a first phase commit for a

transaction representing a unit of work (see paragraph [0023]);

(b) inserting an entry in said relational table corresponding to said unit of work and transmitting an instruction to said server to prepare to commit for said transaction (see paragraph [0023]), said relational table stored in said server (see Benson et al. paragraphs [0022] and [0023]),

(d) receiving a request from said client to perform any of the following decisions: a COMMIT, a ROLLBACK, or a RECOVER (see Benson et al. paragraph [0064]. Clients may initiate rollbacks); and

(e) updating said relational table after execution of said request (see Benson et al. paragraph [0030]).

Benson et al. does not explicitly teach wherein said inserted entry indicating said unit of work is potentially an indoubt entry

Cotner et al. teaches wherein said inserted entry indicating said unit of work is potentially an indoubt entry (see 13:32-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Benson et al. by the teachings of Cotner et al., because Cotner et al. teaches the benefit of that allowing a two-phase commit protocol to work properly, even when the client acting as the coordinator does not have a log to record two-phase state information (see Abstract).

Benson et al. as modified does not teach:

(c) minimizing cost by placing a request for said insertion of entry in said relational table on a network message that includes said instruction to said server to prepare to commit as part of said XA-2 phase commit protocol for said transaction;

Verma et al. teaches:

(c) minimizing cost by placing a request for said insertion of entry in said

relational table on a network message that includes said instruction to said server to

prepare to commit as part of said XA-2 phase commit protocol for said transaction (see

7:57-7:62. Benson et al. teaches sending requests comprising both the insertion

operation and a preparation to commit (see [0023]). However, Benson et al. doesn't

clearly teach that the requests are on the same message. Verma et al. teaches placing

a request for an operation and an instruction to prepare to commit on a network

message);

Therefore, it would have been obvious to one of ordinary skill in the art to have

modified Benson et al. by the teachings of Verma et al. because Verma et al. teaches

the benefit of establishing a common understanding of time across a number of logs

(see 3:8).

As to claim 2, Benson et al. as modified teaches wherein received request is a

COMMIT or a ROLLBACK decision, and said method comprises the steps of:

communicating with said server and processing said COMMIT or ROLLBACK

request, and upon successful processing (see Benson et al. paragraph [0064]),

deleting an entry corresponding to said COMMIT OR ROLLBACK request in said

relational table (see Benson et al. paragraph [0064]).

As to claim 6, <u>Benson et al</u>. as modified teaches wherein said relational table is a SQL table and said step of inserting an entry in said relational table is performed via issuing a SQL INSERT instruction (see <u>Benson et al</u>. paragraphs [0032]-[0034]. An SQL table is generated into which rows are inserted).

As to claim 8, <u>Benson et al</u>. as modified teaches wherein said method is implemented across networks (see <u>Benson et al</u>. paragraphs [0022]-[0023]).

As to claim 9, <u>Benson et al</u>. as modified teaches wherein said across networks element comprises any of, or a combination of, the following: local are network, wide area network, wireless network, or the Internet (see <u>Benson et al</u>. paragraph [0022]).

As to claim 10, <u>Benson et al</u>. as modified teaches wherein steps (a) through (d) are performed over a separate network connection, said separate network connection separate from a network connection over which requests for updating entries in said relational table are placed to avoid starting a new unit of work (see <u>Cotner et al</u>. 7:40-50 and Figure 4. There exist separate network connections for requests).

As to claim 11, <u>Benson et al</u>. as modified teaches wherein said method comprises the step of mapping said XA 2-phase protocol onto a protocol supported by said server (see <u>Benson et al</u>. paragraphs [0022]-[0023]).

As to claim 12, please refer to the rejection of claim 1, above.

As to claim 13, please refer to the rejection of claim 2, above.

As to claim 16, please refer to the rejection of claim 6, above.

As to claim 18, <u>Benson et al</u>. teaches a computer-based method implementing a robust XA 2-phase commit protocol between a transaction manager and a database cluster via software facilitating communications with said transaction manager and said database cluster, said computer-based method comprising the steps of:

(a) creating an SQL table for storing a list of potentially indoubt units of work (see abstract, paragraphs [0032]-[0033]);

(b) receiving an invocation from said transaction manager for a first phase of commit for a transaction representing an unit of work (see paragraph [0023]);

transmitting a prepare to commit instruction to said database cluster, said SQL INSERT instruction and said prepare to commit instruction placed on one network message to minimize cost (see <u>Benson et al</u>. paragraphs [0023] and [0032]);

(e) receiving a request from said transaction manager to perform any of the following decisions: a COMMIT, a ROLLBACK, or a RECOVER (see <u>Benson et al</u>. paragraph [0064]) and

(f) updating said SQL table after execution of said request (see <u>Benson et al</u>. paragraph [0030]).

Benson et al. does not explicitly teach:

(d) inserting, via an SQL INSERT instruction, an indoubt entry in said SQL table corresponding to said unit of work

Cotner et al. teaches:

(d) inserting, via an SQL INSERT instruction, an indoubt entry in said SQL table corresponding to said unit of work (see 13:32-55)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Benson et al. by the teachings of Cotner et al., because Cotner et al. teaches the benefit of that allowing a two-phase commit protocol to work properly, even when the client acting as the coordinator does not have a log to record two-phase state information (see Abstract).

Benson et al. as modified does not teach:

(c) minimizing cost by placing a request for an SQL INSERT instruction on a network message that includes an instruction to said database cluster to prepare to commit as part of said XA 2-phase commit protocol for said transaction;

Verma et al. teaches:

(c) minimizing cost by placing a request for an insert instruction on a network message that includes an instruction to said database cluster to prepare to commit as part of said XA 2-phase commit protocol for said transaction (see 7:57-7:62. Benson et al. teaches sending requests comprising both the insertion operation and a preparation to commit (see [0023]). However, Benson et al. doesn't clearly teach that the requests

are on the same message. <u>Verma et al</u>. teaches placing a request for an operation and

an instruction to prepare to commit on a network message.);

Therefore, it would have been obvious to one of ordinary skill in the art to have

modified <u>Benson et al</u>. by the teachings of <u>Verma et al</u>. because <u>Verma et al</u>. teaches

the benefit of establishing a common understanding of time across a number of logs

(see 3:8).

As to claim 19, <u>Benson et al</u>. as modified teaches communicating with said

database cluster and processing said COMMIT or ROLLBACK request (see <u>Benson et</u>

<u>al</u>. paragraph [0064]), and upon successful processing,

deleting an entry corresponding to said COMMIT or ROLLBACK request in said

relational table via an SQL DELTE instruction (see paragraph [0064]. An SQL table is

used in <u>Benson et al</u>. Thus, an instruction to delete is inherently an 'SQL DELETE

instruction').

As to claim 20, <u>Benson et al</u>. as modified teaches wherein steps (a) through (e)

are performed over a separate network connection, said separate network connection

separate from a network connection over which said SQL DELETE instructions are

placed to avoid starting a new unit of work (see <u>Cotner et al</u>. 7:40-50 and Figure 4.

There exist separate network connections for requests).

As to claim 24, <u>Benson et al</u>. as modified teaches wherein said method is implemented across networks (see <u>Benson et al</u>. paragraphs [0022]-[0023]).

As to claim 25, <u>Benson et al</u>. as modified teaches wherein said across networks element comprises any of, or a combination of, the following: local area network, wide area network, wireless network, or the Internet (see <u>Benson et al</u>. [0022]-[0023]).

4.   Claims 3-4, 14 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Benson et al</u>. (US Patent 6,873,995) in view of <u>Cotner et al</u>. (US 5,884,327), further in view of <u>Verma et al</u>. (US Patent 7,072,912), and further in view of <u>Freund et al</u>. (US 5,923,833)

As to claim 3, <u>Benson et al</u>. as modified teaches the method as per claim 1.

<u>Benson et al</u>. does not explicitly teach:

wherein said received request is a RECOVER decision, and said method comprises the steps of:

querying said relational table to identify a list of indoubt units of work;

transmitting said list of indoubt units of work to said client;

receiving a COMMIT or ROLLBACK decision from said client;

communicating with said server to process said COMMIT or ROLLBACK request, and upon successful processing,

deleting an entry corresponding to said COMMIT or ROLLBACK request in said relational table.

Freund et al. teaches:

wherein said received request is a RECOVER decision (see 11:22-35),

querying said relational table to identify a list of indoubt units of work (see Freund et al. 11:22-35);

transmitting said list of indoubt units of work to said client (see Freund et al. 11:22-35);

receiving a COMMIT or ROLLBACK decision from said client (see Freund et al. 11:22-35);

communicating with said server to process said COMMIT or ROLLBACK request, and upon successful processing (see Freund et al. 11:22-35),

deleting an entry corresponding to said COMMIT or ROLLBACK request in said relational table (see Freund et al. 11:22-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Benson et al. by the teachings of Freund et al., because Freund et al. would provide Benson et al. the benefit of "in the case of a bank automated teller machine (ATM) from which a customer seeks to withdraw money, the actions of issuing the money, reducing the balance of money on hand in the machine and reducing the customer's bank balance must all occur or none of them must occur. Failure of one of the subordinate actions would lead to inconsistency between the records and actual occurrences" (see 1:15-23).

As to claim 4, <u>Benson et al</u>. as modified teaches a computer-based method as per claim 1.

<u>Benson et al</u>. as modified does not explicitly teach wherein said received request is a RECOVER decision,

<u>Freund et al</u>. teaches wherein said received request is a RECOVER decision (see 11:22-35),

<u>Benson et al</u>. as modified teaches:

said server is a database cluster, and said software supports execution of said RECOVER decision even if one or more members of the database cluster are unavailable (see <u>Cotner et al</u>. 5:12-26 and 5:64-67. Even if a log is unavailable, a transaction can still be recovered).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Benson et al</u>. by the teachings of <u>Freund et al</u>., because <u>Freund et al</u>. would provide <u>Benson et al</u>. the benefit of "in the case of a bank automated teller machine (ATM) from which a customer seeks to withdraw money, the actions of issuing the money, reducing the balance of money on hand in the machine and reducing the customer's bank balance must all occur or none of them must occur. Failure of one of the subordinate actions would lead to inconsistency between the records and actual occurrences" (see 1:15-23).

As to claim 14, please refer to the rejection of claim 3, above.

As to claim 21, <u>Benson et al.</u> teaches a computer-based method as per claim 18.

<u>Benson et al</u>. does not explicitly teach wherein said received request is a

RECOVER decision,

said method comprising the additional steps of:

querying said SQL table to identify a list of indoubt units of work;

transmitting said list of indoubt units of work to said transaction manager;

receiving a commit or rollback decision from said transaction manager;

communicating with said database cluster to process said COMMIT or

ROLLBACK request, and upon successful processing, and

deleting an entry corresponding to said COMMIT or ROLLBACK request in said

SQL table via a SQL DELETE instruction.

<u>Freund et al</u>. teaches wherein said received request is a RECOVER decision

(see 11:22-35),

said method comprising the additional steps of:

querying said SQL table to identify a list of indoubt units of work (see <u>Freund et</u>

<u>al</u>. 11:22-35);

transmitting said list of indoubt units of work to said transaction manager (see

<u>Freund et al</u>. 11:22-35);

receiving a commit or rollback decision from said transaction manager (see

<u>Freund et al</u>. 11:22-35);

communicating with said database cluster to process said COMMIT or

ROLLBACK request, and upon successful processing (see Freund et al. 11:22-35), and

deleting an entry corresponding to said COMMIT or ROLLBACK request in said

SQL table via a SQL DELETE instruction (see Freund et al. 11:22-35 and Benson et al.

paragraph [0045]. Benson et al. teaches a table operated on using SQL).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified Benson et al. by the teachings of Freund

et al., because Freund et al. would provide Benson et al. the benefit of "in the case of a

bank automated teller machine (ATM) from which a customer seeks to withdraw money,

the actions of issuing the money, reducing the balance of money on hand in the

machine and reducing the customer's bank balance must all occur or none of them must

occur. Failure of one of the subordinate actions would lead to inconsistency between

the records and actual occurrences" (see 1:15-23).

As to claim 22, Benson et al. as modified teaches wherein steps of querying,

transmitting, receiving, and communicating are performed over a separate network

connection, said separate network connection separate from a network connection over

which said SQL DELETE instructions are placed to avoid starting a new unit of work

(see Cotner et al. 7:40-50 and Figure 4. There exist separate network connections for

requests)

5.   Claim 5, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Benson et al. (US Patent 6,873,995) in view of (Cotner et al. US 5,884,327), further

in view of Verma et al. (US Patent 7,072,912), and further in view of Hoffman et al. (US

Patent 5,261,102).

       As to claim 5, Benson et al. as modified teaches the method of claim 1.

       Benson et al. does not explicitly teach wherein said relational table specifies row-

level locking

       Hoffman et al. teaches wherein said relational table specifies row-level locking

(see 5:45-56).

       Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified Benson et al. by the teachings of

Hoffman et al., because Hoffman et al. teaches "Both the Database Manager and

Database Services are well known applications for the PS/2 computer and need not be

described in detail". It would have been obvious to one of ordinary skill in the art

because it is a feature of a well-known application.

       As to claims 15 and 23, please refer to the rejection of claim 5 above.

Response to Arguments

6.   Applicant's arguments with respect to the claims have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES D. ADAMS whose telephone number is (571)272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D. A./
Examiner, Art Unit 2164

/Charles Rones/
Supervisory Patent Examiner, Art Unit 2164